

INSIDE THIS ISSUE:

Algeria Hosts Green Economy Conference	1
As Samra Facility Featured at Water in the Arab World Conference	1
Secretary Kerry Calls for More Action on Climate Change	1
Tunisia Recognizes Climate Change in its Constitution	2
EXACT Meetings on Water-Quality Monitoring	2
FAO Regional Meeting; USFS Chief Tidwell in Jordan	2
USFS Activities in Israel	2
Yemen FETP Program	3
Yemeni Biorisk Management Curricula Development	3
IPRED III in Israel	3
The Women in Science Initiative Honors 11 Arab Scientists in 2014	4

World Water Day is March 22

Learn more about the water cycle in English or Arabic at the U.S. Geological Survey site

<http://water.usgs.gov/edu/watercyclesummary.html>

Earth Day is April 22

U.S. Department of State Middle East and North Africa Environment, Science, Technology & Health Hub Newsletter

ISSUE 3

JANUARY / FEBRUARY 2014

Algeria Hosts Green Economy Conference; Focus on Africa

Algeria hosted the African High-Level Conference on the Green Economy February 22-23 in Oran, which included ministers of environment and other senior representatives from 36 African nations. The conference focused on green jobs, poverty eradication, waste management, renewable energy, and energy conservation. It featured remarks by Achim Steiner, Executive Director of the UN Environment Program, and former governor of California Arnold Schwarzenegger, who is founding chair of the non-profit R20 Regions of Climate Action. The conference resulted in an "Oran Declaration" that outlined African countries' will to establish socially-inclusive and sustainable development that can protect the environment and natural resources.



H.E. Abdelmalek Sellal, Prime Minister of Algeria, with Governor Arnold Schwarzenegger.

Photo From R20 Web site: Regions20.org

USAID/MCC WWTF Featured at Water in the Arab World Conference

The University of Jordan hosted a Water in the Arab World — WAWCO 2014 — conference February 25-27 in Amman. The conference convened water experts from across the Middle East and North Africa to discuss transboundary water issues and themes including drought, climate change, population growth, and non-revenue water. Millennium Challenge Corporation (MCC) Jordan Country Director Alex Russin addressed the conference February 26 and outlined how USAID and MCC, with strong support from the U.S. Department of State, is assisting the Jordanian Ministry of Water and Irrigation to develop and expand one of the largest and most modern wastewater treatment facilities (WWTF) in the Middle East. The As-Samra Wastewater Treatment Plant is the primary facility for properly treating wastewater from Jordan's Amman and Zarqa governorates and is a vital source of irrigation water for Jordan's agricultural production. As-Samra was built in 2008 with \$78 million in support from the USAID and is currently being expanded with \$93 million in support from MCC. In both cases, the USG assistance to the Government of Jordan is made in partnership with a private sector developer that has further mobilized over 50 percent of the cost of construction, designed the facility to world class standards and is guaranteeing the high quality operation of the facility. Critical to the success and sustainability of the project was the use of the build-operate-transfer (BOT) financing model. For the next 25 years, this investment will provide much needed, high-quality treated water for agricultural production equivalent to more than 10 percent of the country's total water resources. For more information visit: <http://www.mcc.gov/documents/press/action-2012-002-1136-01-first-major-build-operate-transfer-project.pdf>

Secretary Kerry Calls for More Action on Climate Change

Speaking in Jakarta, Indonesia on February 16 Secretary of State John Kerry urged global action on climate change, noting that scientists already predict changing weather patterns, drought, and water shortages that could affect agriculture patterns. For the complete remarks please visit: <http://www.state.gov/secretary/remarks/2014/02/221711.htm>

Tunisia Third Country in the World to Recognize Climate Change in its Constitution

Tunisia made history in January by becoming the first Arab country and the third in the world to address climate change issues in its constitution. The new constitution recognizes the vulnerability of the country to climate change effects and the right to a sound and balanced environment for the Tunisian people. According to reports, environmental advocates hope this will increase government focus on drought, desertification, and pollution.

Jordanian, Israeli, and Palestinian Water Experts Convene at EXACT Workshop

Jordanian, Israeli, and Palestinian water experts met in Jordan February 25-26 on a real-time water-quality monitoring project implemented through the Executive Action Team (EXACT) Multilateral Working Group on Water Resources, established under the Oslo II peace process. The project, funded by the State Department's Middle East Multilaterals program, provides four advanced, real-time water quality monitoring stations to Jordan, Israel, the West Bank, and Gaza intended for sharing data in an online information portal. The project develops water-quality monitoring capacity and helps ensure that water-quality management decisions are grounded in science. Delegations discussed shared concerns about protecting groundwater from sewage, industrial, and agriculture pollution, and the need for capabilities, such as early flood-warning systems. Representatives from the U.S. Department of Agriculture (USDA), the U.S. Geological Survey (USGS), and the U.S. Environmental Protection Agency (EPA), facilitated the workshop and shared U.S. water-quality and conservation resources. USGS discussed U.S. Water Quality Data for the Nation, available online at <http://waterdata.usgs.gov/nwis/qw>; USDA shared an online database of conservation practices: http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/ecoscience/?cid=nrcs143_026849; EPA described broader programming, including fellowships for international scientists, and cooperation with the National Institute of Environmental Health Sciences: <http://www.niehs.nih.gov/>. The Core Parties expressed interest in building on the cooperation and more broadly communicating the project's progress.

Jordan Hosts 21st Session of the Near East Forestry Rangeland Commission and U.S. Forest Service Chief Visit

The UN FAO Near East Forestry Rangeland Commission (NEFRC) convened in Amman January 26-30 for meetings on forestry and rangeland management, watershed management, green economy, and food security. Experts from across the region presented, including representatives from Iraq, Lebanon, and Egypt. Participants shared case studies for valuing and monetizing natural resources to show the benefits of protecting forest areas for eco-tourism. Experts and NGO representatives discussed examples of public-private partnerships to rehabilitate forests, rangelands, marshlands, and mangroves.

Following the NEFRC meetings, U.S. Forest Service Chief Thomas Tidwell represented the North American Forest Commission at the Committee on Forestry (COFO) Bureau meeting January 31. COFO discussions focused on forests and the Sustainable Development Goal Process, as well as themes for the upcoming 2015 World Forestry Congress. Chief Tidwell met with Jordanian counterparts, including the Secretary General for the Ministry of Agriculture. Forestry officials led tours to Ajloun and Debeen, to review tree damage caused by unusually heavy snows in December 2013. Officials and forestry NGO representatives highlighted the important role forests play in protecting groundwater. Chief Tidwell spoke to youth environmental activists at the Princess Basma Resource Youth Center. The students asked insightful questions about the challenges presented by climate change and developing economies in an environmentally sustainable way.



USFS Chief Tidwell (back row, third from right)



Photo courtesy of Embassy Tel Aviv

USFS Reforestation Activities in Israel

On January 14 and 15, a U.S. Forest Service team conducted a technical exchange mission to Israel addressing issues related to reforestation in dryland ecosystems, seed collection and processing, and tree nursery management. In collaboration with the Keren Kayemeth LeIsrael-Jewish National Fund (KKL), site visits were made to planting sites, seed processing facilities, and KKL's Golani Nursery. The purpose of this mission was for U.S. and Israeli experts to share knowledge and experience on improved forestry practices. This mission also coincided with the Tu Bishvat holiday, recognized as Israeli Arbor Day. This year marks the 26th year of the U.S. Forest Service and KKL's collaborative partnership to improve natural resource management.

Yemen Hosts First National FETP Conference

Yemen hosted the First National Yemen Field Epidemiology Training Program (FETP) Conference in Sana'a February 26-27, and graduated its first cohort of FETP residents on February 27. The 12 FETP residents presented their work to an audience of 200 including the director generals of health offices and surveillance coordinators from Yemen's 23 governorates, the deans of the medical schools, the directors of the national disease control programs, and international partners including UNICEF, WHO and EMPHNET. The Minister of Public Health and Population provided opening remarks.

The U.S. Centers for Disease Control and Prevention (CDC) partners with ministries of health in the region through FETPs to help build sustainable capacity for preventing, detecting and responding to health threats, and develop regional expertise so that outbreaks can be detected early and prevented from spreading.



Left: Dr. Mohamed G. Qayad,

Resident Advisor Yemen FETP

Right: Dr Abdulwahed Al-Serouri, Technical Advisor Yemen FETP

Photo courtesy of Dr. Qayad



Photo Courtesy of Department of State Biosecurity Engagement Program

Yemeni Professors Gather to Discuss Biorisk Management Curricula Development

A group of 15 Yemeni professors, representing eight universities, convened in February for a workshop on developing biorisk management curricula for implementation across the tertiary education system in Yemen. The workshop was held in Addis Ababa, Ethiopia, and was funded by the Department of State's Biosecurity Engagement Program. Sandia National Laboratories, which has extensive expertise in developing training materials related to biosafety and biosecurity, facilitated the discussion. To ensure the curricula covered the full spectrum of biological risks and responsible research issues, the workshop also

included participation by a bioethics expert from Georgetown University. Recognizing that curriculum development can be a long process involving many stakeholders, the workshop was designed to be an opportunity for this group of committed professors to think concretely about the objectives, target audience, and desired outcomes from the curricula. Not only was the group able to put together first drafts of course outlines during the workshop, they also agreed upon a timeline of next steps, in order to ensure sustainability and success of the project. Under this timeline, implementation of the courses in Yemen would begin in September 2014, with the result of substantially expanding exposure to biorisk management and biosecurity best practices across Yemen.

Israel Hosts IPRED III Conference, Focusing on Disaster Preparedness and Cybersecurity

Israel hosted the third International Conference on Healthcare System Preparedness and Response to Emergencies and Disasters (IPRED III) in January. The event featured U.S. speakers, including Department of Homeland Security Deputy Under Secretary for Science and Technology Daniel Gerstein, officials from the CDC, and representatives from U.S. universities. Medical and disaster-response professionals shared experiences from the earthquake in Haiti, "super-storm Sandy," and Typhoon Haiyan in the Philippines, stressing the importance of coordinated communication systems across emergency-response services. In a separate presentation, Israeli Defense Forces described their humanitarian response to the Syrian crisis. The military field hospital has treated at least 350 wounded Syrians who crossed into Israel since February 2012. All of Syria's neighbors have done extraordinary work to assist refugees in the wake of the conflict there. IPRED III also focused on cybersecurity and the need for tighter controls in hospital and healthcare systems, especially as more institutions develop electronic medical records.

World Tuberculosis Day, March 24

<http://www.cdc.gov/TB/events/WorldTBDay/default.htm>

World Health Day, April 7

<http://www.who.int/campaigns/world-health-day/2014/en/>

The Women in Science Initiative Celebrates Arab Scientists in 2014

U.S. Embassy Amman's Environment, Science, Technology and Health Office for the Middle East and North Africa launched the "Women in Science" initiative in 2010 to honor outstanding women scientists throughout the region. Women from a variety of scientific disciplines are recognized for their accomplishments and efforts to serve as role models for women and girls pursuing science education and careers. This year's honorees are inspiring leaders in diverse fields, ranging from medicine, biotechnology, nanotechnology, chemistry, and genetics. They are:

- **H.E. Dr. Laila AbuHassan**, former senator, professor of physics and nanotechnology at the University of Jordan.
- **Dr. Sara Abu Kaf**, clinical psychology researcher, lecturer and mental health practitioner at Ben-Gurion University.
- **Dr. Shaikha Al Arrayed**, head of the Genetic Department at Salmaniya Medical Complex, Bahrain.
- **Professor Abeer Al Bawwab**, director of Hamdi Mango Center for Scientific Research and professor of physical chemistry at the University of Jordan.
- **Dr. Halima Benbouza**, director of the Biotechnology Research Center, Algeria.
- **Dr. Hassna Chennaoui**, professor of geology and geochemistry at Hassan II University, Morocco.
- **Dr. Huda Al-Duwaisan**, head of the Yarmouk Primary Health Care Clinic and head of the Primary Health Care Faculty at the Kuwait Institution for Medical Specialization.
- **Dr. Wafa Hasan**, assistant professor in environmental engineering at Palestine Polytechnic University in Hebron.
- **Ms. Rayan Al-Kalbani**, co-founder of Mazoon Environmental & Technological Services LLC, Oman.
- **Professor Dhuha Saad Saleh**, professor in immunology and pathogenic bacteria, Department of Biology, University of Baghdad.
- **H.E. Dr. Hayat Suliman Sindi**, founder and CEO of i2 and member of Shura Council, Saudi Arabia.

In February we feature Algerian scientist **Dr. Halima Benbouza**, Director of the Biotechnology Research Center, Constantine. She received her doctorate from the Gembloux Agro-BioTech University in Belgium studying Plant Breeding and Genetics and was offered a postdoctoral position to work on a collaborative project with the ARS-USDA in Stoneville, Mississippi. Subsequently, Dr. Benbouza was funded by Dow Agro Science to study Fusarium wilt resistance in cotton. In 2009 she was awarded the Special Prize Eric Daugimont et Dominique Van der Rest by the Gembloux Agro-BioTech University. Dr. Benbouza is a lecturer at Batna University where she teaches graduate and postgraduate students in the Institute of Veterinary Medicine and Agronomy and the Faculty of Biology Faculty. She also supervises Master's and PhD students. In 2011 she was appointed by the Algerian government to be President of the Intersectoral Commission of Health and Life Science. Dr. Benbouza is a member of the Algerian National Council for Research Evaluation and of the Sectorial Permanent Board of the Ministry of Higher Education and Scientific Research. In 2013, Dr. Benbouza was appointed by the Prime Minister to be the president of the steering committee for the Biotech Pharma Project in Algeria.



Dr. Halima Benbouza.
Photo courtesy of Embassy Algiers

Interested in U.S. Environmental Businesses and Exports?

Check out this Department of Commerce link:
<http://export.gov/industry/environment/>
And visit the U.S. Embassy Web site in your MENA country.

This report is published by Hub Officer Elizabeth Hattingh and Hub Specialist Yara Abu Laban, with contributions from U.S. missions in the region.

For more information about the ESTH Hubs and the State Department's Bureau of Oceans and International Environmental and Scientific Affairs (OES) please look up OES on [Facebook](#) and www.state.gov.



Photo credit: OES Facebook